



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Application of )  
Joerg Rheims, et al. ) Group:  
Serial No.: 10/672,817 )  
Filed: September 26, 2003 ) Examiner: .  
Title: METHOD FOR FIBER STOCK )  
PREPARATION )

INFORMATION DISCLOSURE STATEMENT

MS DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicant wishes to bring to the attention of the Examiner the documents identified on the attached form PTO-1449. Applicant respectfully requests that these documents be made of record in the present application.

A copy of each of the documents is enclosed.

German Patent Document No. DE 691 17 906 teaches a method for high level refining of wood chips or paper pulp, whereby sulfurized chitosan that is sulfurized selectively in the C<sub>3</sub>-/C<sub>6</sub> position, not however in the C<sub>2</sub> position of the NH<sub>2</sub> group is utilized.

German Patent Document DE 29 34 880.9 teaches a method for the production of refined pulp by means of refining material containing lingo-cellulose at a concentration of 8-15%, measured as infeed concentration. The material is shredded in a disk refiner while it is passing through the gap (10) between the refiner disks (6, 7) into a surrounding refiner housing. Water is supplied continuously into the housing (15) outside the refiner disks (6, 7) in order to dilute the shredded material to the point of becoming a fiber suspension that has a concentration which can easily be pumped. The housing (15) is maintained filled with this suspension in order to reduce the fiber pulp flow through the refiner and thereby the retention time of the material between the refiner disks (6, 7).

German Patent Document DE 198 16 621 discloses a refiner operating with an angle of cut (alpha) of at least 40° and a specific cutting edge loading of up to 1500 Ws/km.

European Patent document EP 0 492 600 teaches a refining assisting agent comprising sulfonated chitosan has been provided. With the addition of sulfonated chitosan according to the

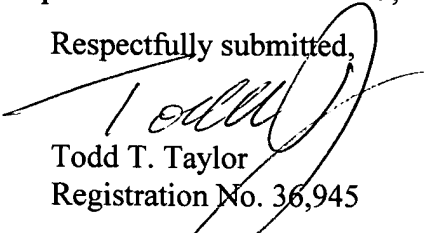
VOI0276.US

present invention, power needed in the refining can be remarkably reduced compared with that needed in the conventional refining. In addition, the refining assisting additive improves paper strength.

This information is being submitted within three months after the filing date of the present application, or before the mailing date of a first Office Action on the merits.

In the event Applicants have overlooked the need for a payment of fee, or additional payment of fee, or have overpaid a fee, Applicants hereby conditionally petition therefor and authorizes that any charges or credits be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Respectfully submitted,

  
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CERTIFICATE OF MAILING

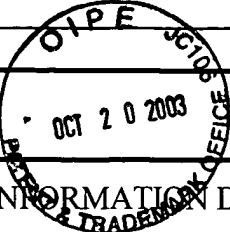
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MS DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: October 15, 2003.

Todd T. Taylor, Reg. No. 36,945

NAME OF REGISTERED REPRESENTATIVE

  
SIGNATURE

October 15, 2003  
DATE

		ATTORNEY DOCKET NO.: VOI0276.US	SERIAL NO: 10/627.817
		INFORMATION DISCLOSURE STATEMENT APPLICANT: Joerg Rheims, et al.	
		FILING DATE: September 26, 2003	GROUP:

## U.S PATENT DOCUMENTS

Examiner Initial *		Document No.	Date	Name	Class	Subclass	Filing Date
	AA	5,007,985	4/1991	Engstrand, et al.	162	26	May 2, 1989
	AB	5,223,090	6/1993	Klungness, et al.	162	9	December 11, 1991
	AC	4,510,020	4/1985	Green, et al.	162	169	June 12, 1980
	AD	4,229,250	10/1980	Lehtinen	162	23	February 28, 1979
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

							Translation	
		Document No.	Date	Country	Class	Subclass	Yes	No
	AL	DE69117906	5/1996	Germany	D21C	9/00		X
	AM	DE2934880	11/1980	Germany	D21B	1/30		X
	AN	DE19816621	4/1999	Germany	D21D	1/30		X
	AO	EP0492600	12/1991	Europe	D21B	1/16		X
	AP							

## OTHER REFERENCES (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)


EXAMINER:

DATE CONSIDERED:

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.